

CLAIMS

We claim:

1. Process for the preparation of tetrahydro-3-furoic acid which comprises contacting 3-formyltetrahydrofuran with a molecular oxygen-containing gas at a temperature of about 25 to about 200°C and a pressure of about 1.0 to about 70 bars absolute in the substantial absence of an oxidation catalyst.
2. Process according to Claim 1 wherein the process is carried out in the presence of an inert solvent at a temperature of about 40 to about 175°C and a pressure of about 3.0 to about 50 bars absolute.
3. Process according to Claim 1 wherein the process is carried out at a temperature of about 40 to about 175°C and a pressure of about 3.0 to about 50 bars absolute in the presence of an inert, polar solvent selected from water, C1 to C10 alkanols, C2 to C10 aliphatic and cycloaliphatic ethers, C2 to C10 glycols and C3 to C10 alkyl glycol ethers.
4. Process according to Claim 1 wherein the process is carried out at a temperature of about 40 to about 175°C and a pressure of about 3.0 to about 50 bars absolute using a solution of 3-formyltetrahydrofuran in water wherein the concentration of 3-formyltetrahydrofuran is about 5 to about 80 weight percent.
5. Process according to Claim 1 wherein the process is carried out at a temperature of about 60 to about 150°C and a pressure of about 5.0 to about 30 bars absolute in the presence of an inert, polar solvent selected from water, C1 to C10 alkanols, C2 to C10 aliphatic and cycloaliphatic ethers, C2 to C10 glycols and C3 to C10 alkyl glycol ethers.
6. Process according to Claim 1 wherein the process is carried out at a temperature of about 50 to about 150°C and a pressure of about 5.0 to about 30

bars absolute using a solution of 3-formyltetrahydrofuran in water wherein the concentration of 3-formyltetrahydrofuran is about 5 to about 80 weight percent.

7. Process according to Claim 1 wherein the process is carried out at a temperature of about 50 to about 150°C and a pressure of about 5.0 to about 30 bars absolute using a solution of 3-formyltetrahydrofuran in water wherein the concentration of 3-formyltetrahydrofuran is about 5 to about 80 weight percent and the molecular oxygen-containing gas is oxygen, oxygen diluted by an inert gas, air or oxygen-enriched air.